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FACTOR ANALYSIS OF R-SORT AND ITS RELATIONSHIP TO CATTELL'S SIXTEEN PERSONALITY FACTOR QUESTIONNAIRE

A Thesis

Presented to the

Faculty of

California State College,

San Bernardino

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

in

Psychology

---

by

Lorraine M. Gorski

June 1980

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CHAIRMAN DATE

[redacted]

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ABSTRACT

One hundred fifty four subjects, eighty one males and seventy three females, aged fourteen through sixty four, were administered a newly developed measure of personality derived from Cattell's 16PF test. The measure, called R-Sort, uses sixtyfour descriptors of personality sorted along a 0 to 10 continuum by subjects based on how well it represents them. Each subject sorted these descriptors twice, once for their actual self and then for their ideal self. Subsequent factor analyses of the R-Sorts generated nineteen factors for both the actual and ideal self responses. Identification and description of these factors were discussed and their relationship to Cattell's sixteen personality factors. Further research for cross validation and more extensive examination of the R-Sort procedure were outlined.

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I wish to express my deepest gratitude to my committee: Dr. Khokhlov, Dr. Warren and Dr. O'Hare; whose support and counsel made this research possible. My thanks also to all the staff members of the Computer Center for their patience and help in the culmination of this thesis. As well as, my deepest appreciation for the support and love eminating from my family.

I wish to dedicate this thesis to my loving and dear Nana, Elizabeth D. Haskell.

INTRODUCTION

The usage of tests to build profiles of personality is not a new concept as evidenced by the proliferation of tests. Some tests were designed to support a specific theory while others were designed to evaluate different descriptions of personality. Cattell (1950) attempted to isolate factors that comprehensively describe personality in his 16PF test which assesses personality by means of a self-report questionnaire.

The questionnaire consists of yes/no items and multiple choice items. The development of these questions arose from extensive research starting with a very large pool of personality trait names which were reduced to Cattell's primary source traits through combination, intercorrelation and factor analysis of these items. Cattell's factor analytical techniques established sixteen major factors which Cattel claimed forms the structure of an individual's personality profile (Cattell, 1950; Cattell, 1955). His test is referred to as an objective personality measurement in the sense that an individual's responses remain constant regardless of who scores the test. The literature is prolific on the uses of the 16PF test, but the validity of the 16 factors is still an ongoing controversy. The nature

and number of personality factors as defined by Cattell has been both questioned (Howarth, 1976; Wells and Good, 1977) and supported (Cattell, Eber, and Belhees, 1968; Burdsal and Vaughn, 1974). Levonian (1961) also questioned the factoral homogeneity of the 16PF items as well as the factoral independence of scales.

Q-SORT METHODOLOGY

Cattell's so-called "objective" procedures have also been questioned (Stephenson, 1952). Cattell's method of using objective scoring of an individual's responses based on group norms and standardizations was perceived by Stephenson as measuring at most the external and historical frame of reference of the individual from the observer's standpoint. To research personality from the subject's own vantage point, Stephenson (1953) suggested a general methodology, the Q-technique, for the study of self descriptions and for development of personality profiles. The Q-Sort method requires subjects to sort cards, on each of which is a personality characteristic, along a comparative preference scale. Subjects must place these cards within a predetermined quasi normal distribution. Thus, the Q-Sort method forces an individual's subjective responses into a predetermined number of fixed distribution piles and instead of the usual correlation of objective test results among subjects, the subjects responses become their own norm. Because of its unique methodology, Q-Sort was

instrumental to the empirical verification of actual vs ideal-self concepts (Rogers, 1970). The uses of the Q-Sort have greatly expanded since its development. It is often used to research various methodologies (Guertin, 1973; Lee, 1977); perceptions of well-known individuals (Felkin, 1976) and counselling techniques (Eisenthal, 1973) have also been studied. Computers have also increased its availability and ease of use (Dibb & Alexander, 1977; Dunlap, 1978). Despite its varied applications, some aspects of the Q-Sort are still questioned. Cronbach (1953) suggests a loss of information when a forced-sort is used, since individuals may differ in how they would distribute the cards. Forced distribution procedures, he comments, "... may be psychologically indefensible if there is reason to think that persons differ in their variability over traits.", (p. 379). In 1956, Jones empirically tested the free-sort technique. He found that an individual's free-sort distributions differed significantly from the approximate normal distribution customarily imposed on the Q-Sort. Forcing the quasi normal distribution assumes the distribution of traits in individuals is also quasi-normal. However, Jones's research did not support the quasi-normal distribution and further suggested that the free-sort may retain the information lost in the forced-sort.

The Q-Sort method also does not allow for the subject to discard those personality characteristics that do not

describe any aspect of his/her personality. Subjects are forced into using all the descriptors provided and grouping them into a predetermined fixed distribution.

R-SORT METHODOLOGY

In an attempt to answer certain criticisms made of the Q-Sort methodology, Khokhlov (1979) devised a methodology he terms the R-Sort or reciprocal sort. The R-Sort methodology differs from the Q-Sort in that subjects sort personality descriptors freely, not in a forced quasi normal distribution; subjects are permitted to discard those characteristics which they feel do not represent any aspect of their personality and the R-Sort methodology, for analytical purposes, utilizes descriptors arranged in pairs representing direct bi-polar opposites of each other. Thus, two descriptors are used to describe a personality characteristic, one representing the high rank of that characteristic and the other the low rank, rankings being arbitrarily defined.

The scale used by R-Sort, 0 through 10, allows for subjects to place a descriptor along this continuum based on whether it is "not like me" (1) or "like me" (10) with gradients of similarity between 1 and 10. In addition to the 10 positions on the continuum, an eleventh position, 0, was added to accomodate those individuals who wished to discard those descriptors that did not represent any aspect of their

personality.

The scoring of descriptors in the R-Sort methodology is why the method was termed reciprocal sort, since the scores for the paired descriptors reciprocate, move forward and backward alternately along the previously described continuum to determine an aspect of the individuals personality profile. The scale, 1 through 10 is designed so that the larger the number the greater a descriptor reflects that aspect of the individuals personality. However, technically, there are two scales superimposed upon each other per pair. The first, visible, reflects the scale for the high ranking descriptor of the pair, while the second, not visible, is in reverse order, 10 through 1, and reflects the low ranking descriptor scale. Thus, the influence of a descriptor pair on an individual can be determined by averaging their placement along the continuum adjusting appropriately for the low ranking descriptor. For instance, if a low ranking descriptor is placed on 8 along the visible continuum, it would be adjusted to three to represent the eighth position of the continuum superimposed for the low rankings. If the high ranking descriptor paired with the previous one is placed on five along the continuum the score for the paired descriptors would be calculated at four representing a tendency toward the low ranking of that characteristic. Those scored as zero remain constant since they are discarded by the individual.

TEST COMPARISONS

Comparisons of tests is an often used technique in personality assessment and evaluation of new methodological approaches in personality. Researchers are continually comparing their tests with established tests to determine their own test's validity (Karson and Pool, 1957; Stroup and Manderschied, 1977). Earlier research by Friedman, Sasek and Wakefield (1976) suggested that a comparison between direct self ratings and indirect self ratings is possible. Their study concluded that twelve of the self rated factors intercorrelated significantly with those generated by Cattell's 16PF test showingd that subjects could rate themselves fairly accurately on most of the dimensions where they were given only the names of the dimensions. To closer investigate possible methodological issues related to the type of research planned, a pilot study was performed in the Fall of 1979 using a similar approach. Direct self ratings, derived from the R-Sort, were compared with indirect self rating, derived from the administration of the 16PF test. Thus, the 16PF method of measuring the sixteen personality factors was compared to the R-Sort method of measuring the same sixteen personality factors.

Pilot Study

Subjects.

Fifty-six psychology students agreed to participate from the campus of California State College, San Bernardino, twenty-one males and thirty-five females. Their ages ranged from fifteen to sixty-two.

Materials.

Twenty-eight undergraduate psychology students at California State College, San Bernardino, were used to generate a set of sixty-four descriptors representing the sixteen factors proposed by Cattell's 16PF test, four descriptors per factor. Students were given a list of sixty pairs of descriptions (see Appendix A) taken from the Handbook for the 16 Personality Factor Questionnaire. Each group of descriptions was related to letters A, B, C, E etc.; representing the corresponding factors, as defined by Cattell. Students were asked to select two pairs, for replications, from each group based on how clearly and meaningfully they describe some common characteristic of personality. The thirty-two pairs chosen most often, two from each factor group, comprised the set of sixty-four cards. This technique was utilized to prevent too many highly related items.

Sorting cards were then printed, 8.5 cm X 4.5 cm, each having one of the descriptors upon it. On the reverse side

of each card, in pencil, a number was written in the lower left hand corner corresponding to the descriptors position in the list (see Appendix B). An eleven columned response sheet (see Appendix C) allowing for any number of cards to be placed within a single column was used by subjects to record their sorts. The continuum on the response sheets ranged from 0 through 10: 0, not represented or discard; 1, unlike me through 10, like me. Those numbers between 1 and 10 represent various levels of similarity.

Procedure.

Using the materials generated, students administered form A and form B of the 16PF test to both themselves and other persons, being careful to follow the directions exactly. Students then completed and/or administered the R-Sort for both an actual and ideal self-report. Subjects were given the sixty-four descriptors to sort along the 0 through 10 continuum, once for the actual self; how they actually perceive themselves to be and a second time for their ideal self; how they would like to or could be. They were instructed to examine each descriptor and place it along the scale based on how well it represented them, depending on whether they were sorting their actual self or ideal self at that time. The number recorded on the back of each card, associated with that descriptor, was recorded on the response sheet within their respective columns. This was done for both sorts. Then rankings of the cards, self

sorted by subjects, were inputted into a program (see Appendix D) that would convert relative rankings of the reciprocal descriptors into a standard score (1 to 10) for each of 16 factors.

Results

A Pearson correlation was compiled for fifty-two of the subjects, the remaining four excluded due to incomplete R-Sorts and showed that fourteen same factor comparisons were significantly correlated when the 16PF test was compared to the Actual R-Sort (see Table 1). Table 1 also shows seven significant correlations for the 16PF test/Ideal R-Sort comparison and fifteen significant correlations for the Actual/Ideal R-Sort comparison. Despite these significant correlations, in order to take into consideration the influence of all factors on one another, a discrimanant analysis was performed on the data. The subject's responses to the 16PF test, real R-Sort and the ideal R-Sort were evaluated. The analysis between 16PF and the real R-Sort ($F(16,87)=10.02246$, $p < .05$) indicated that the measures differed significantly. Such that, a sujbects score on a factor in the 16PF test differed from the score for that same factor that was obtained from the real R-Sort. The analysis on the 16PF and the ideal R-Sort ($F(16,87)=16.59460$, $p < .05$) and real vs ideal R-Sort ($F(16,87)=6.68431$, $p < .05$) also indicated that the descriptors being measured were interpreted differently by

TABLE 1

Intercorreltaions of Factor Scores on the
Sixteen Personality Factor Test and the R-Sort (N=52)

Factors Compared	16PF/R-Sort Actual	16PF/R-Sort Ideal	R-Sort/R-Sort Actual/Ideal
1	.04	-.21	.31**
2	.49**	.46**	.64**
3	.46**	.25*	.33**
4	.57**	.09	.27*
5	.45**	.21	.27*
6	.25*	.19	.28*
7	.52**	.35**	.39**
8	.20	.10	.46**
9	.32**	.35**	.28*
10	.25*	.21	.42**
11	-.34**	-.11	.30*
12	.51**	.40**	.33**
13	.46**	.30*	.61**
14	.51**	.37**	.56**
15	.42**	.14	.32**
16	.55**	-.01	.21

* $p<.05$
** $p<.01$

subjects for each test. Graphing the frequency of group values; the number of cases which scored a factor similarly; demonstrates how the measures differ between the 16PF test vs Actual R-Sort (see Figure 1), the 16PF test vs the Ideal R-Sort (see Figure 2) and the Actual vs Ideal R-Sort (see Figure 3). Interpolating a normal distribution on these frequencies further show two differing distributions emerging from the discriminant analysis. However, by decreasing the number of factors evaluated at one time, the likelihood of finding similarity of responses by subjects on both tests increases. For instance, in the 16PF test vs the real R-Sort analysis the subject's responses for two descriptor pairs, conservative-experimenting and relaxed-tense were evaluated. The analysis indicated that the scores were similar for both tests ($F(2,101)=0.05014$, $p > .05$) since they could not be discriminated. The graph (see Figure 4) shows how the measures are distributed similarly.

Discussion

The correlational results from the comparison of the 16PF test method and the R-Sort method suggest that scores from both tests are similar. Table 1 shows fourteen and fifteen significantly correlated factor comparisons for the Actual R-Sort and 16PF analysis and the Actual R-Sort and Ideal R-Sort analysis respectively, while seven significantly correlated factor comparisons resulted from

FIGURE 1. 16PF VS ACTUAL R-SORT

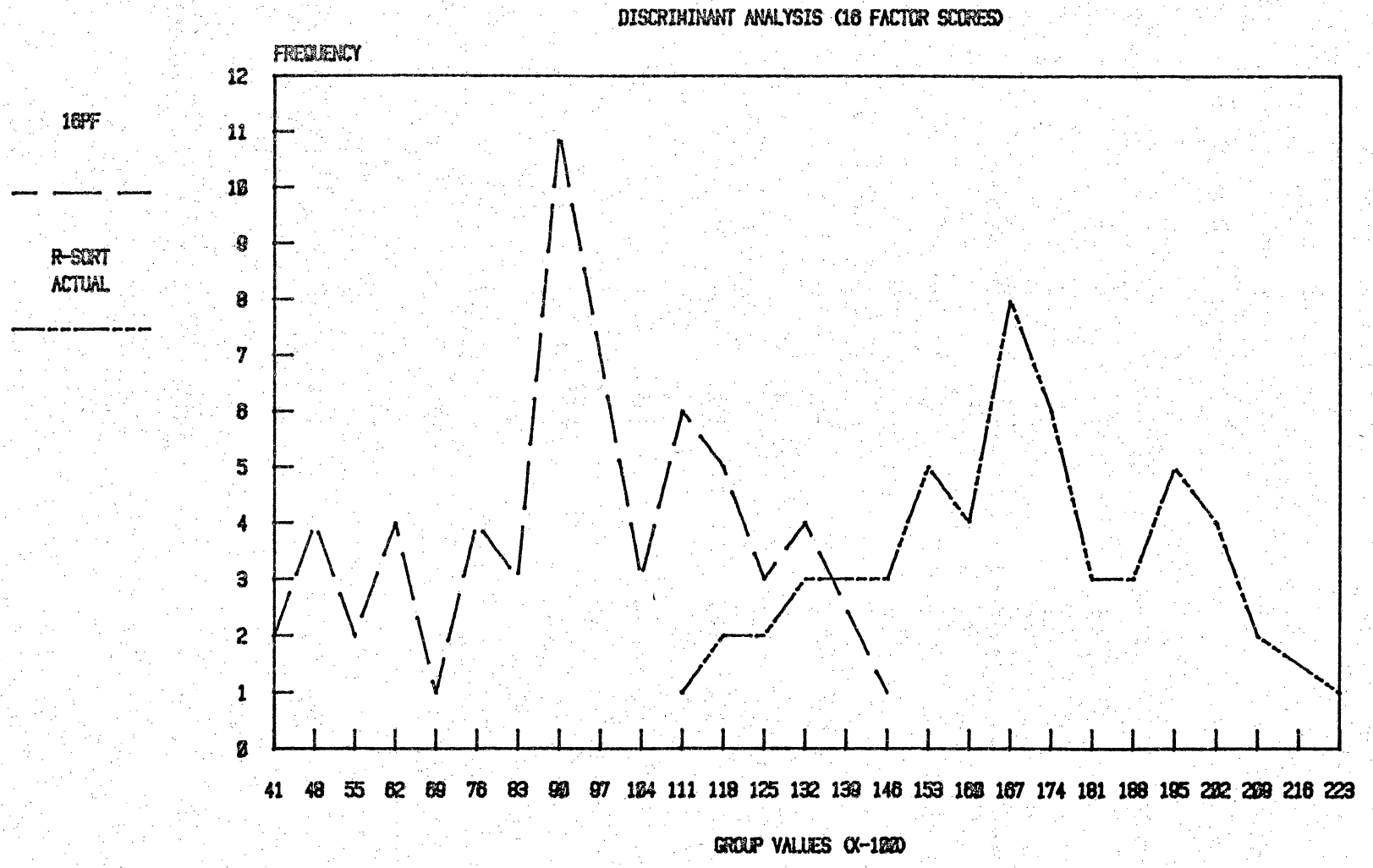


FIGURE 2. 16PF VS IDEAL R-SORT

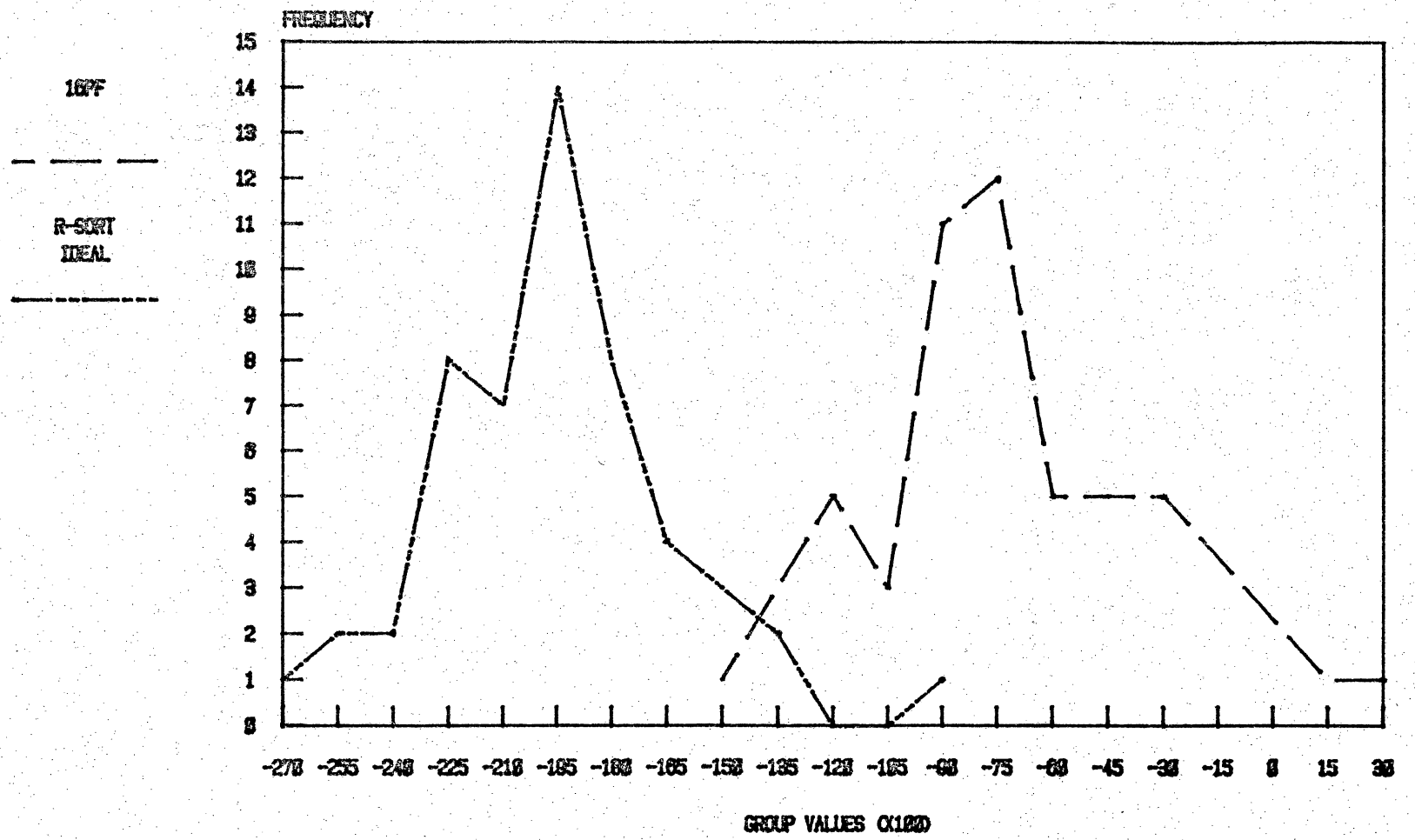


FIGURE 3. ACTUAL R-SORT VS IDEAL R-SORT

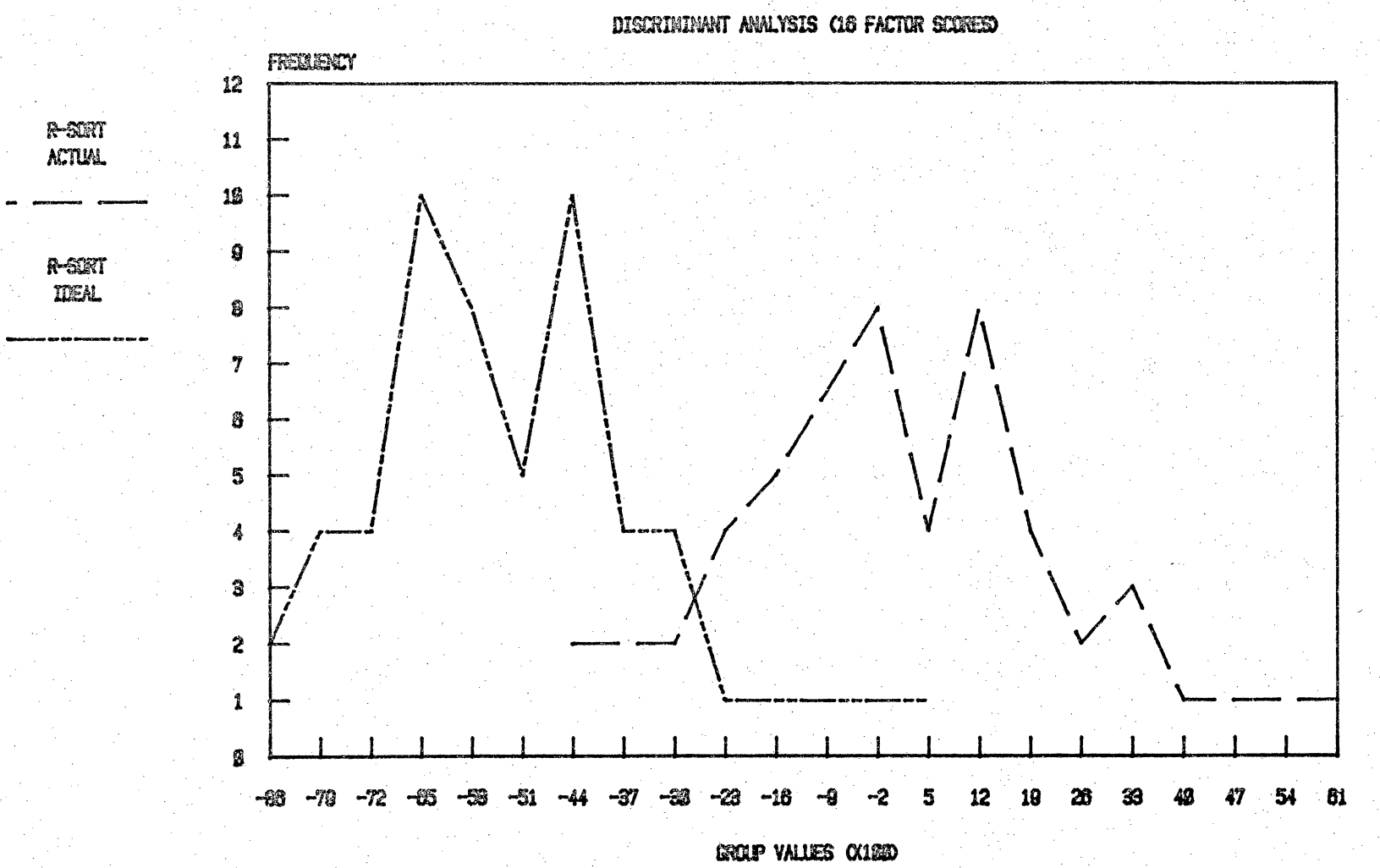
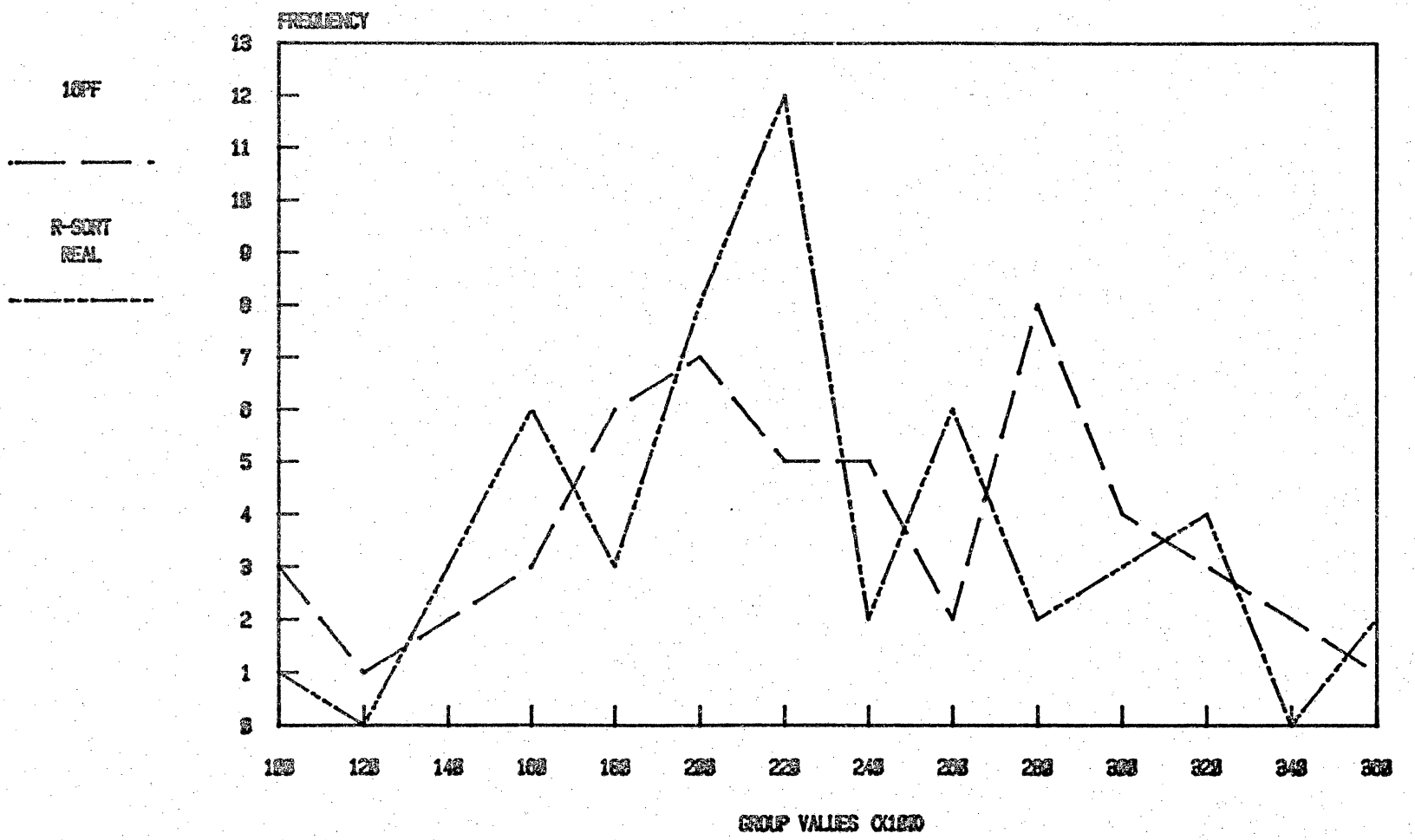


FIGURE 4. 16PF VS REAL R-SORT



the Ideal R-Sort and 16PF analysis. These significant correlations ranged from twenty-five to sixty-four percent and were highly specific since they only took into account one of the sixteen factors at a time.

However, the results of the discriminant analysis evaluating all sixteen factors simultaneously indicated that the scores on the sixteen personality factors for subjects were different when obtained by the R-Sort as opposed to the 16PF test method, suggesting an individuals score on the same factor differed as a function of the test methodology used. However, the difference in test scores may also be attributable to the order of presentation, since the 16PF test was always administered first. It could also be a result of the different techniques. The 16PF test relies on indirect self ratings of different aspects of personality since scores for a factor are derived from a variety of questions related to the characteristic but not specifically stating what that characteristic is, while the R-Sort utilizes a direct self rating approach, since subjects rate a particular characteristic directly. Some measures are similar, as seen in Figure 4, suggesting the R-Sort could possibly detect factors normally derived from the indirect method just as Friedman, Sasek and Wakefield (1976) determined that direct self ratings of the 16 factors were possible. However, what the R-Sort measures and how these measures can be interpretted need to be explored. Further

investigation into the factors that can be isolated from the R-Sort technique using the generated descriptors should be explored. Special attention should also be given to order of administration of the test.

Main Study

A factor analytic approach was used to establish what aspects of personality are isolated and quantified by R-Sorts, and whether those aspects correlate or correspond to the factors suggested by Cattell or his model of personality.

Method

Subjects.

One hundred fifty-four individuals agreed to participate from the campus of California State College, San Bernardino. Among the one hundred fifty-four subjects, eighty-one were male and seventy-three were female, ranging in ages from fourteen to sixty-four with a mean age of thirty-one.

Materials.

Subjects were given a set of instructions, a set of sixty-four sorting cards and two response sheets: one for the real self sort and the other for the ideal self sort. The instructions (see Appendix E) outline the purpose of the study and what was requested of each subject in the study. The response sheet (see Appendix C) have eleven columns lined off, column 0 (not represented in my personality), column 1 (not like me) through coulmn 10 (like me) comprise the scale of the R-Sort.

Procedure.

The procedure from the pilot study was followed. However, administration of Cattell's 16PF test was excluded since the relationship between 16PF and R-Sort was not being evaluated. Each subject was given a set of instructions, brief information as to the purpose and the limitations of the R-Sort method and were asked to read through them carefully. If they still agreed to participate in the study they initialed and recorded their sex and age at the bottom of the form. Confidentiality of their responses was assured. They were then given a set of sixty-four sorting cards, well shuffled, and two response sheets, one labeled real, the other ideal. Subjects were requested to examine each card and begin placing each along the R-Sort scale, 0 through 10, based on the degree to which it represents them. The order in which subjects sorted for their real or ideal self was counterbalanced. When subjects completed their first sort, they were instructed to turn the cards over and record the card number in its respective column. The cards then were shuffled again and the subject repeated the process for the next sort. After both sorts were completed, materials were collected and the instruction sheet was checked for completion. Subjects were thanked for their participation and released. Resultant information was sent out to all subjects at the conclusion of the study. The R-Sort was administered to as many subjects at one time that could be comfortably accomodated.

RESULTS

Actual R-Sort Analysis

An orthogonal factor analysis, using principal components with varimax rotation, was performed on data resulting from the administration of the Actual R-Sort. A constant of one was added to each of the subjects responses to facilitate the analysis. Nineteen independent factors were obtained which accounted for seventy per cent of the variance. For purposes of clarity and communication, the factors are briefly summarized with an identifying term for that factor and the variance accounted for by that factor in Table 2.

The independent factors generated were the result of a mathematical examination of a correlation matrix of scores. Yet, all the descriptors significantly correlated with a generated factor were not associated with or identified as being linked to that factor by the analysis, since the analysis used a higher correlational criterion level for determining which descriptors would comprise an independent factor. Tables 3 through 21 show which descriptors were linked to the factor by the analysis and those not linked yet significantly correlated with the factor based on the sample number. For purposed of clarity and communication, the factors are briefly summarized with an identifying term for that factor and the variance accounted for by that

TABLE 2

Variance Accounted for by Actual R-Sort Factors

Factor	Identifyer	Variance Accounted for (%)
1	Intrapersonal pragmatism	15
2	Self unworthiness	9
3	Frustrative instability	6
4	Intellectual efficiency	4
5	Social confidence	3
6	Mature values	4
7	Inhibitive	3
8	Social rigidity	3
9	Rational control	2
10	Easygoing	3
11	Contentedness	2
12	Social dependence	3
13	Exact	2
14	Critical	2
15	Traditional	2
16	Emotional	2
17	Self indulgent	2
18	Loquatious	1
19	Tyrannical	2

TABLE 3

Factor Analysis of the Actual R-Sort
Factor 1 : Intrapersonal Pragmatism

Descriptors Linked by Analysis with Factor 1 :

Positively Correlated	Negatively Correlated
5L2 STICKS TO INNER VALUES	
8L1 SELF-RELIANT	
8L2 ACTS ON PRACTICAL LOGIC	
9L2 TOLERANT OF OTHERS	
10L1 PRACTICAL	
10L2 LIVES BY PRACTICAL NEEDS	
12L1 SELF-ASSURED	
15L1 FOLLOWS OWN URGES	

Descriptors Not Linked by the Analysis
but Correlated with Factor 1 :

Positively Correlated		Negatively Correlated	
4L2 ACCOMODATING	***	1L2 RIGID	*
9L1 FORGETS PAST DIFFICULTIES	*	3L2 ELUDES RESPONSIBILITIES	***
16L1 RELAXED	**	3H2 ACCEPTS RESPONSIBILITY	*
16L2 UNFRUSTRATED	**	4L1 SUBMISSIVE	*
		4H1 ASSERTIVE	*
		7L2 WITHDRAWN	*
		11L1 VAGUE	***
		12L2 INSENSITIVE TO DISAPPROVAL	*
		14L1 GROUP-DEPENDENT	**
		14H2 LIKES INDEPENDENCE	**

* $p<.05$
** $p<.01$
*** $p<.001$

TABLE 4

Factor Analysis of the Actual R-Sort
Factor 2 : Self Unworthiness

Descriptors Linked by Analysis with Factor 2 :

Positively Correlated	Negatively Correlated
1L2 RIGID	
2L1 NOT AN ABSTRACT THINKER	
2L2 INTELLECTUALLY DULL	
6L1 DISREGARDS RULES	
7L2 WITHDRAWN	
12L2 INSENSITIVE TO DISAPPROVAL	
14L1 GROUP-DEPENDENT	
15L2 CARELESS OF SOCIAL RULES	

Descriptors Not Linked by the Analysis
but Correlated with Factor 2 :

Positively Correlated		Negatively Correlated	
3L2 ELUDES RESPONSIBILITIES	***	4L2 ACCOMODATING	***
4L1 SUBMISSIVE	**	4H2 STUBBORN	*
11L1 VAGUE	***	5L2 STICKS TO INNER VALUES	**
14L2 A JOINER	***	8L1 SELF-RELIANT	***
16L2 UNFRUSTRATED	*	10L1 PRACTICAL	**
		10L2 LIVES BY PRACTICAL NEEDS	*
		13L2 TRADITIONS BOUND	*

* $p<.05$
** $p<.01$
*** $p<.001$

TABLE 5

Factor Analysis of the Actual R-Sort
Factor 3 : Frustrative Instability

Descriptors Linked by Analysis with Factor 3 :	
Positively Correlated	**Negatively Correlated**
8H1 INSECURE	3H1 EMOTIONALLY STABLE
9H1 DWELLS ON FRUSTRATIONS	
12H1 APPREHENSIVE	
16H1 TENSE	
16H2 FRUSTRATED	

Descriptors Not Linked by the Analysis but Correlated with Factor 3 :			
Positively Correlated		**Negatively Correlated**	
7H1 IMPULSIVE	**	1H1 EASYGOING	**
12H2 SENSITIVE TO DISAPPROVAL	***	1H2 ADAPTABLE	*
		3H2 ACCEPTS RESPONSIBILITY	**
		6H2 EMOTIONALLY DISCIPLINED	**
		14H1 SELF-SUFFICIENT	**

* $p<.05$
** $p<.01$
*** $p<.001$

TABLE 6

Factor Analysis of the Actual R-Sort
Factor 4 : Intellectual Efficiency

Descriptors Linked by Analysis with Factor 4 :	
Positively Correlated	Negatively Correlated
2H1 CAN THINK ABSTRACT	
10H1 IMAGINATIVE	
13H1 EXPERIMENTING	
13H2 FREE THINKING	

Descriptors Not Linked by the Analysis but Correlated with Factor 4 :			
Positively Correlated		Negatively Correlated	
1H2 ADAPTABLE	***	2L2 INTELLECTUALLY DULL	*
2H2 INTELLECTUALLY BRIGHT	***	9L1 FORGETS PAST DIFFICULTIES	*
4H1 ASSERTIVE	*	15H2 FOLLOWS SOCIAL RULES	*
7H1 IMPULSIVE	**	16L1 RELAXED	*
8H2 ACTS ON INTUITION	**		
10H2 LIVES BY IDEAS	***		
11H1 EXACT	**		
11H2 AMBITIOUS	*		
14H1 SELF-SUFFICIENT	*		
14H2 LIKES INDEPENDENCE	*		

* $p<.05$
** $p<.01$
*** $p<.001$

TABLE 7

Factor Analysis of the Actual R-Sort
Factor 5 : Social Confidence

Descriptors Linked by Analysis with Factor 5 :	
Positively Correlated	**Negatively Correlated**
4H1 ASSERTIVE	
7H2 LIKES TO MEET PEOPLE	
11H2 AMBITIOUS	

Descriptors Not Linked by the Analysis but Correlated with Factor 5 :			
Positively Correlated		**Negatively Correlated**	
2H2 INTELLECTUALLY BRIGHT	**	4L1 SUBMISSIVE	**
13H2 FREE THINKING	*	4L2 ACCOMODATING	***
14H1 SELF-SUFFICIENT	**	9L2 TOLERANT OF OTHERS	***
		16L1 RELAXED	*

* $p<.05$
** $p<.01$
*** $p<.001$

TABLE 8

Factor Analysis of the Actual R-Sort
Factor 6 : Mature Values

Descriptors Linked by Analysis with Factor 6 :				
Positively Correlated			Negatively Correlated	
3H2 ACCEPTS RESPONSIBILITY				
6H1 CONSCIENTIOUS				
Descriptors Not Linked by the Analysis but Correlated with Factor 6 :				
Positively Correlated			Negatively Correlated	
1H2 ADAPTABLE	***		8L1 SELF-RELIANT	**
3H1 EMOTIONALLY STABLE	**			
4H1 ASSERTIVE	*			
7H2 LIKES TO MEET PEOPLE	*			
9L1 FORGETS PAST DIFFICULTIES	*			
10L2 LIVES BY PRACTICAL NEEDS	*			
11H1 EXACT	*			
11H2 AMBITIOUS	*			
14L2 A JOINER	*			
14H2 LIKES INDEPENDENCE	**			
15H2 FOLLOWS SOCIAL RULES	*			

* $p<.05$
** $p<.01$
*** $p<.001$

TABLE 9

Factor Analysis of the Actual R-Sort
Factor 7 : Inhibitive

Descriptors Linked by Analysis with Factor 7 :			
Positively Correlated		Negatively Correlated	
5L1 TENDS TO BE SILENT			
Descriptors Not Linked by the Analysis but Correlated with Factor 7 :			
Positively Correlated		Negatively Correlated	
3L2 ELUDES RESPONSIBILITIES	***	4H1 ASSERTIVE	***
7L1 RESTRAINED	**	7H1 IMPULSIVE	***
7L2 WITHDRAWN	**	8H2 ACTS ON INTUITION	***
9L1 FORGETS PAST DIFFICULTIES	*	13H2 FREE THINKING	*
		14L2 A JOINER	*
		16L1 RELAXED	**

* $p<.05$
** $p<.01$
*** $p<.001$

TABLE 10

Factor Analysis of the Actual R-Sort
Factor 8 : Social Rigidity

Descriptors Linked by Analysis with Factor 8 :	
Positively Correlated	**Negatively Correlated**
7L1 RESTRAINED	
13L1 CONSERVATIVE	

Descriptors Not Linked by the Analysis but Correlated with Factor 8 :			
Positively Correlated		**Negatively Correlated**	
1L2 RIGID	***	3L2 ELUDES RESPONSIBILITIES	*
1H2 ADAPTABLE	*	6L1 DISREGARDS RULES	*
8L2 ACTS ON PRACTICAL LOGIC	*	9L1 FORGETS PAST DIFFICULTIES	***
14L2 A JOINER	*	12L1 SELF-ASSURED	**
		12H2 SENSITIVE TO DISAPPROVAL	**
		15L1 FOLLOWS OWN URGES	*
		15L2 CARELESS OF SOCIAL RULES	**
		16L1 RELAXED	**

* $p<.05$
** $p<.01$
*** $p<.001$

TABLE 11

Factor Analysis of the Actual R-Sort
Factor 9 : Rational Control

Descriptors Linked by Analysis with Factor 9 :		
Positively Correlated		Negatively Correlated
6H2 EMOTIONALLY DISCIPLINED		
10H2 LIVES BY IDEAS		
15H1 CONTROLS OWN URGES		
Descriptors Not Linked by the Analysis but Correlated with Factor 9 :		
Positively Correlated		Negatively Correlated
3H1 EMOTIONALLY STABLE		*
8H2 ACTS ON INTUITION		*

* p<.05
** p<.01
*** p<.001

TABLE 12

Factor Analysis of the Actual R-Sort
Factor 10 : Easygoing

Descriptors Linked by Analysis with Factor 10 :	
Positively Correlated	Negatively Correlated
1H1 EASYGOING	

Descriptors Not Linked by the Analysis but Correlated with Factor 10 :			
Positively Correlated		Negatively Correlated	
1H2 ADAPTABLE	**	2H2 INTELLECTUALLY BRIGHT	**
7L1 RESTRAINED	*	15L1 FOLLOWS OWN URGES	**
7H1 IMPULSIVE	***	16L2 UNFRUSTRATED	**
7H2 LIKES TO MEET PEOPLE	***		
8H2 ACTS ON INTUITION	**		
10H2 LIVES BY IDEAS	*		
15L2 CARELESS OF SOCIAL RULES	*		

* $p<.05$
** $p<.01$
*** $p<.001$

TABLE 13

Factor Analysis of the Actual R-Sort
Factor 11 : Contentedness

Descriptors Linked by Analysis with Factor 11 :	
Positively Correlated	Negatively Correlated
11L2 CONTENT WITH WHAT COMES	

Descriptors Not Linked by the Analysis but Correlated with Factor 11 :			
Positively Correlated		Negatively Correlated	
2L1 NOT AN ABSTRACT THINKER	*	4H2 STUBBORN	*
4L1 SUBMISSIVE	***	12H1 APPREHENSIVE	*
7L1 RESTRAINED	***		
7H2 LIKES TO MEET PEOPLE	*		
9L1 FORGETS PAST DIFFICULTIES	**		
12L2 INSENSITIVE TO DISAPPROVAL	**		
16L1 RELAXED	***		

* $p<.05$
** $p<.01$
*** $p<.001$

TABLE 14

Factor Analysis of the Actual R-Sort
Factor 12 : Social Dependence

Descriptors Linked by Analysis with Factor 12 :			
Positively Correlated		Negatively Correlated	
5H2 REFLECTS THE GROUP		4H2 STUBBORN	
Descriptors Not Linked by the Analysis but Correlated with Factor 12 :			
Positively Correlated		Negatively Correlated	
10L2 LIVES BY PRACTICAL NEEDS	**	2H2 INTELLECTUALLY BRIGHT	*
15H2 FOLLOWS SOCIAL RULES	**	4H1 ASSERTIVE	*
		8L2 ACTS ON PRACTICAL LOGIC	*
		9L2 TOLERANT OF OTHERS	*
		14H2 LIKES INDEPENDENCE	*

* $p<.05$
** $p<.01$
*** $p<.001$

TABLE 15

Factor Analysis of the Actual R-Sort
Factor 13 : Exact

Descriptors Linked by Analysis with Factor 13 :	
Positively Correlated	Negatively Correlated
11H1 EXACT	

Descriptors Not Linked by the Analysis but Correlated with Factor 13 :	
Positively Correlated	Negatively Correlated
3H1 EMOTIONALLY STABLE ***	8H1 INSECURE *
6H2 EMOTIONALLY DISCIPLINED **	8H2 ACTS ON INTUITION *
11L1 VAGUE **	9L1 FORGETS PAST DIFFICULTIES **
14H1 SELF-SUFFICIENT *	10H2 LIVES BY IDEAS **
15H2 FOLLOWS SOCIAL RULES ***	

* $p<.05$
** $p<.01$
*** $p<.001$

TABLE 16

Factor Analysis of the Actual R-Sort
Factor 14 : Critical

Descriptors Linked by Analysis with Factor 14 :			
Positively Correlated		Negatively Correlated	
1L1 CRITICAL			
Descriptors Not Linked by the Analysis but Correlated with Factor 14 :			
Positively Correlated		Negatively Correlated	
8L2 ACTS ON PRACTICAL LOGIC	*	8H1 INSECURE	*
12H2 SENSITIVE TO DISAPPROVAL	*	10L2 LIVES BY PRACTICAL NEEDS	*
13H1 EXPERIMENTING	*	16L2 UNFRUSTRATED	***
14H1 SELF-SUFFICIENT	**		
14H2 LIKES INDEPENDENCE	***		
15L1 FOLLOWS OWN URGES	*		

* $p<.05$
** $p<.01$
*** $p<.001$

TABLE 17

Factor Analysis of the Actual R-Sort
Factor 15 : Traditional

Descriptors Linked by Analysis with Factor 15 :	
Positively Correlated	Negatively Correlated
13L2 TRADITIONS BOUND	

Descriptors Not Linked by the Analysis but Correlated with Factor 15 :	
Positively Correlated	Negatively Correlated
2L1 NOT AN ABSTRACT THINKER **	12L1 SELF-ASSURED *
4L1 SUBMISSIVE **	12L2 INSENSITIVE TO DISAPPROVAL *
8H2 ACTS ON INTUITION ***	14L2 A JOINER *
11L1 VAGUE **	
13L1 CONSERVATIVE **	
14L1 GROUP-DEPENDENT *	

* $p<.05$
** $p<.01$
*** $p<.001$

TABLE 18

Factor Analysis of the Actual R-Sort
Factor 16 : Emotional

Descriptors Linked by Analysis with Factor 16 :	
Positively Correlated	Negatively Correlated
3L1 GETS EMOTIONAL	

Descriptors Not Linked by the Analysis but Correlated with Factor 16 :	
Positively Correlated	Negatively Correlated
4L2 ACCOMODATING	** 3H1 EMOTIONALLY STABLE *
14L2 A JOINER	* 7H1 IMPULSIVE *
15L1 FOLLOWS OWN URGES	*14H1 SELF-SUFFICIENT *
	14H2 LIKES INDEPENDENCE *
	16L2 UNFRUSTRATED *

* p<.05
** p<.01
*** p<.001

TABLE 19

Factor Analysis of the Actual R-Sort
Factor 17 : Self Indulgent

Descriptors Linked by Analysis with Factor 17 :	
Positively Correlated	Negatively Correlated
6L2 SELF-INDULGENT	

Descriptors Not Linked by the Analysis but Correlated with Factor 17 :	
Positively Correlated	Negatively Correlated
7L2 WITHDRAWN	* 2H2 INTELLECTUALLY BRIGHT **
8H2 ACTS ON INTUITION	* 8L2 ACTS ON PRACTICAL LOGIC *
9L2 TOLERANT OF OTHERS	*12H1 APPREHENSIVE **
11L1 VAGUE	*12H2 SENSITIVE TO DISAPPROVAL ***

* $p<.05$
** $p<.01$
*** $p<.001$

TABLE 20

Factor Analysis of the Actual R-Sort
Factor 18 : Loquatious

Descriptors Linked by Analysis with Factor 18 :	
Positively Correlated	Negatively Correlated
5H1 TENDS TO BE TALKATIVE	

Descriptors Not Linked by the Analysis but Correlated with Factor 18 :	
Positively Correlated	Negatively Correlated
7H2 LIKES TO MEET PEOPLE *	6H2 EMOTIONALLY DISCIPLINED *
14L1 GROUP-DEPENDENT *	7L2 WITHDRAWN *
15H2 FOLLOWS SOCIAL RULES ***	

* p<.05
** p<.01
*** p<.001

TABLE 21

Factor Analysis of the Actual R-Sort
Factor 19 : Tyrannical

Descriptors Linked by Analysis with Factor 19 :	
Positively Correlated	Negatively Correlated
9H2 TYRANNICAL	

Descriptors Not Linked by the Analysis but Correlated with Factor 19 :	
Positively Correlated	Negatively Correlated
4H2 STUBBORN	*** 2L1 NOT AN ABSTRACT THINKER **

* p<.05
** p<.01
*** p<.001

factor in Table 2.

Ideal R-Sort Analysis

Data resulting from the administration of the Ideal R-Sort was processed through the same statistical analysis as was the Actual R-Sort data. Nineteen independent factors were also obtained which accounted for sixty-eight per cent of the variance. Table 22 summarizes the factors and their identifying term and variance accounted for by that factor. The remaining tables, 23 through 41 show thoses descriptors linked to the factor by the analysis and those not linked yet significantly correlated with the factor as previously stated.

TABLE 22

Variance Accounted for by Ideal R-Sort Factors

Factor	Identifyer	Variance Accounted for (%)
1	Intrapersonal pragmatism	18
2	Self unworthiness	8
3	Frustrative instability	5
4	Rational control	5
5	Free thinking	3
6	Social dependence	3
7	Responsibly intellectual	3
8	Tyrannical insecurity	3
9	Social rigidity	3
10	Restrained	2
11	Abstract thinker	2
12	Loquatious	3
13	Concentered	2
14	Impulsive	2
15	Live for moment	2
16	Exact	1
17	Sensitive to disapproval	2
18	Outgoing	2
19	Stubborn	1

TABLE 23

Factor Analysis of the Ideal R-Sort
Factor 1 : Intrapersonal Pragmatism

Descriptors Linked by Analysis with Factor 1 :	
Positively Correlated	**Negatively Correlated**
4L2 ACCOMODATING	
5L2 STICKS TO INNER VALUES	
8L1 SELF-RELIANT	
8L2 ACTS ON PRACTICAL LOGIC	
9L2 TOLERANT OF OTHERS	
10L1 PRACTICAL	
10L2 LIVES BY PRACTICAL NEEDS	
12L1 SELF-ASSURED	
15L1 FOLLOWS OWN URGES	
16L1 RELAXED	
16L2 UNFRUSTRATED	

Descriptors Not Linked by the Analysis but Correlated with Factor 1 :			
Positively Correlated		**Negatively Correlated**	
9L1 FORGETS PAST DIFFICULTIES	*	1L2 RIGID	***
11L2 CONTENT WITH WHAT COMES	***	2L1 NOT AN ABSTRACT THINKER	**
		2L2 INTELLECTUALLY DULL	**
		3L1 GETS EMOTIONAL	*
		3L2 ELUDES RESPONSIBILITIES	**
		4L1 SUBMISSIVE	***
		4H1 ASSERTIVE	*
		6L1 DISREGARDS RULES	**
		7L2 WITHDRAWN	**
		11L1 VAGUE	***
		14L1 GROUP-DEPENDENT	***
		14H2 LIKES INDEPENDENCE	**
		15L2 CARELESS OF SOCIAL RULES	***

* $p<.05$
** $p<.01$
*** $p<.001$

TABLE 24

Factor Analysis of the Ideal R-Sort
Factor 2 : Self Unworthiness

Descriptors Linked by Analysis with Factor 2 :

Positively Correlated	Negatively Correlated
1L2 RIGID	
2L1 NOT AN ABSTRACT THINKER	
2L2 INTELLECTUALLY DULL	
3L2 ELUDES RESPONSIBILITIES	
4L1 SUBMISSIVE	
5L1 TENDS TO BE SILENT	
7L2 WITHDRAWN	
11L1 VAGUE	
15L2 CARELESS OF SOCIAL RULES	

Descriptors Not Linked by the Analysis
but Correlated with Factor 2 :

Positively Correlated		Negatively Correlated	
1L1 CRITICAL	***	5L2 STICKS TO INNER VALUES	**
3L1 GETS EMOTIONAL	*	8L1 SELF-RELIANT	**
6L1 DISREGARDS RULES	***	9L2 TOLERANT OF OTHERS	*
6L2 SELF-INDULGENT	*	10L1 PRACTICAL	*
7L1 RESTRAINED	*	10H2 LIVES BY IDEAS	*
8H1 INSECURE	*	12L1 SELF-ASSURED	**
9H1 DWELLS ON FRUSTRATIONS	*	16L1 RELAXED	**
13L1 CONSERVATIVE	*		
13L2 TRADITIONS BOUND	**		
14L1 GROUP-DEPENDENT	***		

* $p<.05$
** $p<.01$
*** $p<.001$

TABLE 25

Factor Analysis of the Ideal R-Sort
Factor 3 : Frustrative Instability

Descriptors Linked by Analysis with Factor 3 :	
Positively Correlated	Negatively Correlated
8H1 INSECURE	
9H1 DWELLS ON FRUSTRATIONS	
16H1 TENSE	
16H2 FRUSTRATED	

Descriptors Not Linked by the Analysis but Correlated with Factor 3 :	
Positively Correlated	Negatively Correlated
9H2 TYRANNICAL	** 2H2 INTELLECTUALLY BRIGHT *
14L2 A JOINER	*** 3H1 EMOTIONALLY STABLE **

* p<.05
** p<.01
*** p<.001

TABLE 26

Factor Analysis of the Ideal R-Sort
Factor 4 : Rational Control

Descriptors Linked by Analysis with Factor 4 :			
Positively Correlated		Negatively Correlated	
6H2	EMOTIONALLY DISCIPLINED		
14H1	SELF-SUFFICIENT		
14H2	LIKES INDEPENDENCE		

Descriptors Not Linked by the Analysis but Correlated with Factor 4 :			
Positively Correlated		Negatively Correlated	
3H1	EMOTIONALLY STABLE	***12H1	APPREHENSIVE *
6H1	CONSCIENTIOUS	*	
10H2	LIVES BY IDEAS	*	
13H1	EXPERIMENTING	***	
15H1	CONTROLS OWN URGES	**	

* p<.05
** p<.01
*** p<.001

TABLE 27

Factor Analysis of the Ideal R-Sort
Factor 5 : Free Thinking

Descriptors Linked by Analysis with Factor 5 :	
Positively Correlated	Negatively Correlated
13H2 FREE THINKING	

Descriptors Not Linked by the Analysis but Correlated with Factor 5 :	
Positively Correlated	Negatively Correlated
1H1 EASYGOING *	2L1 NOT AN ABSTRACT THINKER **
2H1 CAN THINK ABSTRACT **	12L2 INSENSITIVE TO DISAPPROVAL **
8H2 ACTS ON INTUITION **	
10H1 IMAGINATIVE ***	
10H2 LIVES BY IDEAS ***	
11H2 AMBITIOUS **	
13H1 EXPERIMENTING ***	

* $p<.05$
** $p<.01$
*** $p<.001$

TABLE 28

Factor Analysis of the Ideal R-Sort
Factor 6 : Social Dependence

Descriptors Linked by Analysis with Factor 6 :		
Positively Correlated		Negatively Correlated
5H2 REFLECTS THE GROUP		
15H2 FOLLOWS SOCIAL RULES		

Descriptors Not Linked by the Analysis but Correlated with Factor 6 :		
Positively Correlated		Negatively Correlated
1H2 ADAPTABLE		*
3H1 EMOTIONALLY STABLE		*
6H2 EMOTIONALLY DISCIPLINED		***
12H1 APPREHENSIVE		**
14L1 GROUP-DEPENDENT		*
15H1 CONTROLS OWN URGES		*

* $p<.05$
** $p<.01$
*** $p<.001$

TABLE 29

Factor Analysis of the Ideal R-Sort
Factor 7 : Responsibly Intellectual

Descriptors Linked by Analysis with Factor 7 :	
Positively Correlated	Negatively Correlated
2H2 INTELLECTUALLY BRIGHT	
3H2 ACCEPTS RESPONSIBILITY	
11H2 AMBITIOUS	

Descriptors Not Linked by the Analysis but Correlated with Factor 7 :	
Positively Correlated	Negatively Correlated
3L1 GETS EMOTIONAL	* 1H1 EASYGOING **
4H1 ASSERTIVE	***10H2 LIVES BY IDEAS **
6H1 CONSCIENTIOUS	**

* p<.05
** p<.01
*** p<.001

TABLE 30

Factor Analysis of the Ideal R-Sort
Factor 8 : Tyrannical Insecurity

Descriptors Linked by Analysis with Factor 8 :	
Positively Correlated	Negatively Correlated
9H2 TYRANNICAL	6H1 CONSCIENTIOUS
12H1 APPREHENSIVE	

Descriptors Not Linked by the Analysis but Correlated with Factor 8 :			
Positively Correlated		Negatively Correlated	
5H2 REFLECTS THE GROUP	*	1H1 EASYGOING	*
16H1 TENSE	**	1H2 ADAPTABLE	**
		3H1 EMOTIONALLY STABLE	*
		10H1 IMAGINATIVE	*
		14L2 A JOINER	**
		15H2 FOLLOWS SOCIAL RULES	*

* $p<.05$
** $p<.01$
*** $p<.001$

TABLE 31

Factor Analysis of the Ideal R-Sort
Factor 9 : Social Rigidity

Descriptors Linked by Analysis with Factor 9 :	
Positively Correlated	Negatively Correlated
13L1 CONSERVATIVE	
13L2 TRADITIONS BOUND	

Descriptors Not Linked by the Analysis but Correlated with Factor 9 :	
Positively Correlated	Negatively Correlated
1H2 ADAPTABLE	*
7L1 RESTRAINED	*
14L1 GROUP-DEPENDENT	**
14L2 A JOINER	***

* p<.05
** p<.01
*** p<.001

TABLE 32

Factor Analysis of the Ideal R-Sort
Factor 10 : Restrained

Descriptors Linked by Analysis with Factor 10 :	
Positively Correlated	**Negatively Correlated**
7L1 RESTRAINED	

Descriptors Not Linked by the Analysis but Correlated with Factor 10 :			
Positively Correlated		**Negatively Correlated**	
4L1 SUBMISSIVE	**	4H1 ASSERTIVE	*
4L2 ACCOMODATING	*	6L1 DISREGARDS RULES	***
13L1 CONSERVATIVE	*	10H2 LIVES BY IDEAS	***
		12L2 INSENSITIVE TO DISAPPROVAL	**
		14L1 GROUP-DEPENDENT	*
		15L2 CARELESS OF SOCIAL RULES	**

* $p<.05$
** $p<.01$
*** $p<.001$

TABLE 33

Factor Analysis of the Ideal R-Sort
Factor 11 : Abstract Thinker

Descriptors Linked by Analysis with Factor 11 :			
Positively Correlated		Negatively Correlated	
2H1 CAN THINK ABSTRACT			
Descriptors Not Linked by the Analysis but Correlated with Factor 11 :			
Positively Correlated		Negatively Correlated	
1H2 ADAPTABLE	*	3L1 GETS EMOTIONAL	***
2H2 INTELLECTUALLY BRIGHT	***		
4H1 ASSERTIVE	*		
11L2 CONTENT WITH WHAT COMES	*		
13H1 EXPERIMENTING	**		

* p<.05
** p<.01
*** p<.001

TABLE 34

Factor Analysis of the Ideal R-Sort
Factor 12 : Loquatious

Descriptors Linked by Analysis with Factor 12 :	
Positively Correlated	Negatively Correlated
5H1 TENDS TO BE TALKATIVE	

Descriptors Not Linked by the Analysis but Correlated with Factor 12 :			
Positively Correlated		Negatively Correlated	
6H1 CONSCIENTIOUS		* 3L1 GETS EMOTIONAL	***
9H2 TYRANNICAL		*11L2 CONTENT WITH WHAT COMES	**
10H1 IMAGINATIVE		***15H1 CONTROLS OWN URGES	*

* p<.05
** p<.01
*** p<.001

TABLE 35

Factor Analysis of the Ideal R-Sort
Factor 13 : Concentered

Descriptors Linked by Analysis with Factor 13 :	
Positively Correlated	Negatively Correlated
6L2 SELF-INDULGENT	
12L2 INSENSITIVE TO DISAPPROVAL	

Descriptors Not Linked by the Analysis but Correlated with Factor 13 :	
Positively Correlated	Negatively Correlated
1L1 CRITICAL	***10L1 PRACTICAL *
15L1 FOLLOWS OWN URGES	**10H1 IMAGINATIVE *

* p<.05
** p<.01
*** p<.001

TABLE 36

Factor Analysis of the Ideal R-Sort
Factor 14 : Impulsive

Descriptors Linked by Analysis with Factor 14 :		
Positively Correlated		Negatively Correlated
7H1 IMPULSIVE		

Descriptors Not Linked by the Analysis but Correlated with Factor 14 :		
Positively Correlated		Negatively Correlated
1H1 EASYGOING	**	
8H2 ACTS ON INTUITION	**	
10H1 IMAGINATIVE	*	
11L2 CONTENT WITH WHAT COMES	*	
12L2 INSENSITIVE TO DISAPPROVAL	*	
15L2 CARELESS OF SOCIAL RULES	*	

* p<.05
** p<.01
*** p<.001

TABLE 37

Factor Analysis of the Ideal R-Sort
Factor 15 : Live for Moment

Descriptors Linked by Analysis with Factor 15 :	
Positively Correlated	Negatively Correlated
9L1 FORGETS PAST DIFFICULTIES	1H1 EASYGOING

Descriptors Not Linked by the Analysis but Correlated with Factor 15 :			
Positively Correlated		Negatively Correlated	
4L2 ACCOMODATING	***	1L1 CRITICAL	*
9L2 TOLERANT OF OTHERS	*	10L2 LIVES BY PRACTICAL NEEDS	*
		12H1 APPREHENSIVE	*

* $p<.05$
** $p<.01$
*** $p<.001$

TABLE 38

Factor Analysis of the Ideal R-Sort
Factor 16 : Exact

Descriptors Linked by Analysis with Factor 16 :	
Positively Correlated	Negatively Correlated
11H1 EXACT	

Descriptors Not Linked by the Analysis but Correlated with Factor 16 :			
Positively Correlated		Negatively Correlated	
1H2 ADAPTABLE	*	8H2 ACTS ON INTUITION	**
3L1 GETS EMOTIONAL	**	14L1 GROUP-DEPENDENT	*
5L1 TENDS TO BE SILENT	**	16H2 FRUSTRATED	*
6H2 EMOTIONALLY DISCIPLINED	**		
13H1 EXPERIMENTING	*		
15H1 CONTROLS OWN URGES	*		

* p<.05
** p<.01
*** p<.001

TABLE 39

Factor Analysis of the Ideal R-Sort
Factor 17 : Sensitive to Disapproval

Descriptors Linked by Analysis with Factor 17 :	
Positively Correlated	Negatively Correlated
12H2 SENSITIVE TO DISAPPROVAL	

Descriptors Not Linked by the Analysis but Correlated with Factor 17 :	
Positively Correlated	Negatively Correlated
1H2 ADAPTABLE	*** 1H1 EASYGOING *
3H2 ACCEPTS RESPONSIBILITY	** 4H1 ASSERTIVE **
13H1 EXPERIMENTING	**14L1 GROUP-DEPENDENT *
	14L2 A JOINER *

* p<.05
** p<.01
*** p<.001

TABLE 40

Factor Analysis of the Ideal R-Sort
Factor 18 : Outgoing

Descriptors Linked by Analysis with Factor 18 :		
Positively Correlated		Negatively Correlated
7H2 LIKES TO MEET PEOPLE		

Descriptors Not Linked by the Analysis but Correlated with Factor 18 :		
Positively Correlated		Negatively Correlated
3H1 EMOTIONALLY STABLE		*
8H2 ACTS ON INTUITION		*
11L2 CONTENT WITH WHAT COMES		**
11H2 AMBITIOUS		*
12H1 APPREHENSIVE		*
15H1 CONTROLS OWN URGES		**

* p<.05
** p<.01
*** p<.001

TABLE 41

Factor Analysis of the Ideal R-Sort
Factor 19 : Stubborn

Descriptors Linked by Analysis with Factor 19 :	
Positively Correlated	**Negatively Correlated**
4H2 STUBBORN	

Descriptors Not Linked by the Analysis but Correlated with Factor 19 :	
Positively Correlated	**Negatively Correlated**
4H1 ASSERTIVE	** 6H1 CONSCIENTIOUS **
8H2 ACTS ON INTUITION	***15L1 FOLLOWS OWN URGES *

* $p<.05$
** $p<.01$
*** $p<.001$

Discussion

For ease of discussion, the results from the actual and ideal R-Sorts will be first discussed seperately and only the first few factors that emerged, those that accounted for most of the variance. Then a comparison of the actual and ideal analyses will be discussed summarizing the extent of this research

As seen in Tables 2 through 21 the factor analysis of the actual R-Sort did not generate sixteen factors similar to Cattell's. However, the method of administration and the descriptors used are still at an exploratory level. Yet, those descriptors linked to a factor tended to be grouped by content. For instance, Factor 1 (see table 3) linked those descriptors suggesting practicality together while also including descriptors relating to the individual's self. Factor 3 (see Table 5), on the other hand, linked descriptors dealing with frustrations and insecurity suggesting that frustrations can result in insecurity, apprehension and tension for some. Factor 3 also shows a negatively correlated descriptor which sensibley supports the others, suggesting that if one is insecure then emotional stability can not be maintained. Factor 4 further demonstrates these common sense linkings of descriptors, suggesting that abstract thinkers are imaginative, experimenting and their thoughts have no boundaries.

Although this research is exploratory, it can be seen how personality types can be derived from these varied descriptors. Of course, their validity is still questioned without further research. Especially those factors only linked to one descriptor, such as Factor 7, tendency to be silent. It might be suggested that this resulted from poor sampling of the personality descriptors or it may be an aspect of personality needing more examination. It should be emphasized that at this level of research the meaning of a factor can only be suggested.

In addition to common sense linkings of descriptors, another phenomenon occured. The tendency for only low rankings or only high rankings being linked to a factor emerged from the analysis. One would expect both high and low rankings to emerge as linked with a factor, but this did not occur. The tendency for descriptors of similar content to be linked together may suggest that subject's semantic interpretations of descriptors differed from those held by Cattell.

Similar results emerged from the ideal R-Sort analysis. Factors comparable to Cattell's sixteen personality factors were also not generated from the Ideal R-Sort suggesting the influence of methodology differences and/or differences in semantic interpratations existed. Those descriptors used by Cattell to describe his factors did not appear to be

perceived by subjects in this study as relating to those same factors. However, once again, the linking of descriptors do follow some common sense approach. As in Factor 1 (see Table 23), descriptors relating to practicality and self were linked again. While, Factor 4 linked emotionally disciplined, self- sufficiency and independence, suggesting that self suffieciency leads to independence for which emotional discipline is needed. The other remaining factors should be examined personally since we are dealing with an unsubstaintiated common sense approach in the discussion of these factors. However, a trend does appear.

Once again, only high or only low rankings are linked to a factor in the ideal R-Sort as was seen with the real R-Sort analysis. It can also be seen how similar factors were generated for both the real and ideal R-Sorts. The first four factors, which have the greatest amount of variance accounted for, are similar in content. The other factors diverge at this point, yet some factors correspond later but not at the same level or factor number.

To better understand the scope of this research, a more in depth evaluation of the descriptors and how they are intrepretted by individuals should be explored. The R-Sort's methodological use of the unforced sort and discard pile should also be futher explored in comparative studies,

such as forced vs unforced and discard vs utilization of all descriptors. However, the R-Sort methodology has allowed a new glimpse at the attempt in constructing a personality profile and its future evaluation will determine its place in the field of personality tests.

APPENDIX A

ORIGINAL DESCRIPTOR LIST

PSYCHOLOGY 385, PERSONALITY, FALL QUARTER, 1979 FIRST ASSIGNMENT. RETURN TO THE INSTRUCTIOR AS SOON AS POSSIBLE. FROM EACH LETTER SELECT TWO PAIRS THAT ARE IN YOUR OPINION CLEARLY AND MEANINGFULLY DESCRIBING SOME COMMON CHARACTERISTICS OF PERSONALITY. CIRCLE THAT PAIR AROUND THE LETTER AND THE NUMBER. EXAMPLE: 'I1' AND 'I3' CIRCLED WILL INDICATE TWO BEST PAIRS FOR THE LETTER 'I'.

1	A1	CRITICAL	EASYGOING
2	A2	STANDS BY OWN IDEAS	READY TO COOPERATE
3	A3	DISTRUSTFUL	TRUSTFUL
4	A4	RIGID	ADAPTABLE
5	A5	COLD	WARMHEARTED
6	A6	PRONE TO SULK	LAUGHS READILY
7	B1	NOT AN ABSTRACT THINKER	CAN THINK ABSTRACT
8	B2	INTELLECTUALLY DULL	INTELLECTUALLY BRIGHT
9	C1	GETS EMOTIONAL	EMOTIONALLY STABLE
10	C2	EASILY PERTURBED	CALM
11	C3	ELUDES RESPONSIBILITIES	ACCEPTS RESPONSIBILITY
12	C4	WORRYING	UNRUFFLED
13	E1	SUBMISSIVE	ASSERTIVE
14	E2	CONVENTIONAL	UNCONVENTIONAL
15	E3	HUMBLE	ADMIRATION DEMANDING
16	E4	EXPRESSIVE	SOLEMN
17	E5	ACCOMODATING	STUBBORN
18	F1	TENDS TO BE SILENT	TENDS TO BE TALKATIVE
19	F2	CONCERNED	HAPPY-GO-LUCKY
20	F3	STICKS TO INNER VALUES	REFLECTS THE GROUP
21	G1	DISREGARDS RULES	CONSCIENTIOUS
22	G2	QUITTING	PERSEVERING
23	G3	SELF-INDULGENT	EMOTIONALLY DISCIPLINED
24	G4	SLACK	CONSISTENTLY ORDERED
25	H1	SHY	ADVENTUROUS
26	H2	THREAT-SENSITIVE	SOCIALLY BOLD
27	H3	RESTRAINED	IMPULSIVE
28	H4	WITHDRAWN	LIKES TO MEET PEOPLE
29	I1	TOUGH-MINDED	TENDER-MINDED
30	I2	SELF-RELIANT	INSECURE
31	I3	ACTS ON PRACTICAL LOGIC	ACTS ON INTUITION
32	L1	ACCEPTS OWN UNIMPORTANCE	JEALOUS OF OTHERS
33	L2	FORGETS PAST DIFFICULTIES	DWELLS ON FRUSTRATIONS
34	L3	TOLERANT OF OTHERS	TYRANNICAL
35	L4	CONCILIATORY	IRRITABLE

36	L5	AVOIDS CORRECTING PEOPLE	TENDS TO CORRECT OTHERS
37	M1	PRACTICAL	IMAGINATIVE
38	M2	AVOIDS FAR-FETCHED IDEAS	MAKES IMAGINATION FLY
39	M3	LIVES BY PRACTICAL NEEDS	LIVES BY IDEAS
40	M4	DOWN-TO-EARTH	BOHEMIAN
41	N1	SOCIALLY CLUMSY	SOCIALLY POLISHED
42	N2	VAGUE	EXACT
43	N3	UNPRETENTIOUS	WORLDLY
44	N4	CONTENT WITH WHAT COMES	AMBITIOUS
45	O1	SELF-ASSURED	APPREHENSIVE
46	O2	HAS FEW FEARS	HAS MANY FEARS
47	O3	INSENSITIVE TO DISAPPROVAL	SENSITIVE TO DISAPPROVAL
48	Q11	CONSERVATIVE	EXPERIMENTING
49	Q12	TRADITIONS BOUND	FREE-THINKING
50	Q13	RESPECTS ESTABLISHMENT	LIBERAL
51	Q21	GROUP-DEPENDENT	SELF-SUFFICIENT
52	Q22	SOUND FOLLOWER	PREFERS OWN DECISIONS
53	Q23	A JOINER	LIKES INDEPENDENCE
54	Q31	UNCONTROLLED	CONTROLLED
55	Q32	FOLLOWS OWN URGES	CONTROLS OWN URGES
56	Q33	CARELESS OF SOCIAL RULES	FOLLOWS SOCIAL RULES
57	Q41	RELAXED	TENSE
58	Q42	UNFRUSTRATED	FRUSTRATED
59	Q43	COMPOSED	FRETFUL
60	Q44	TRANQUIL	OVERWROUGHT

APPENDIX B

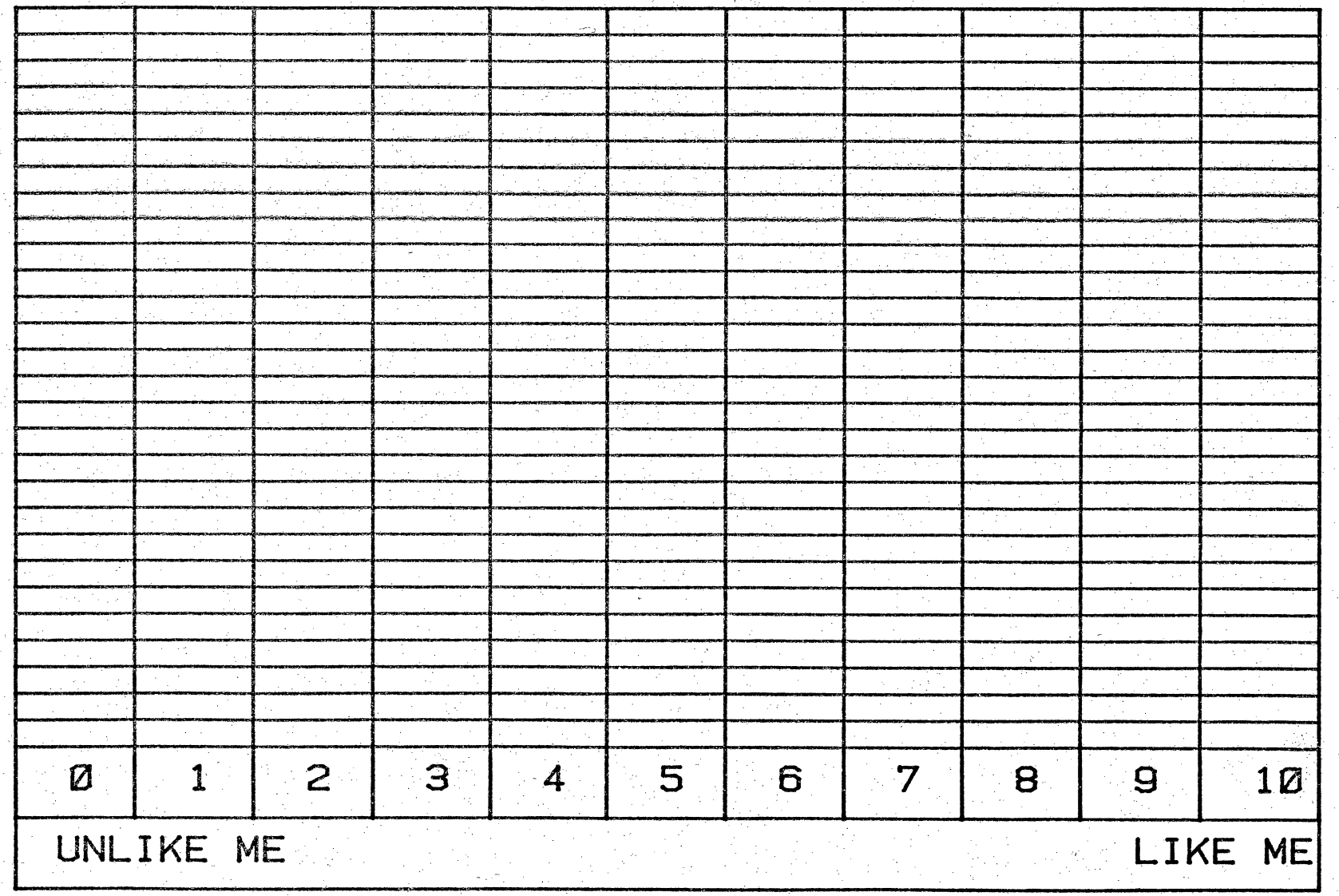
LIST OF R-SORT DESCRIPTORS

1	A1L	CRITICAL
2	A1H	EASYGOING
3	A2L	RIGID
4	A2H	ADAPTABLE
5	B1L	NOT AN ABSTRACT THINKER
6	B1H	CAN THINK ABSTRACT
7	B2L	INTELLECTUALLY DULL
8	B2H	INTELLECTUALLY BRIGHT
9	C1L	GETS EMOTIONAL
10	C1H	EMOTIONALLY STABLE
11	C2L	ELUDES RESPONSIBILITIES
12	C2H	ACCEPTS RESPONSIBILITY
13	E1L	SUBMISSIVE
14	E1H	ASSERTIVE
15	E2L	ACCOMODATING
16	E2H	STUBBORN
17	F1L	TENDS TO BE SILENT
18	F1H	TENDS TO BE TALKATIVE
19	F2L	STICKS TO INNER VALUES
20	F2H	REFLECTS THE GROUP
21	G1L	DISREGARDS RULES
22	G1H	CONSCIENTIOUS
23	G2L	SELF-INDULGENT
24	G2H	EMOTIONALLY DISCIPLINED
25	H1L	RESTRAINED
26	H1H	IMPULSIVE
27	H2L	WITHDRAWN
28	H2H	LIKES TO MEET PEOPLE
29	I1L	SELF-RELIANT
30	I1H	INSECURE
31	I2L	ACTS ON PRACTICAL LOGIC
32	I2H	ACTS ON INTUITION
33	L1L	FORGETS PAST DIFICULTIES
34	L1H	DWELLS ON FRUSTRATIONS
35	L2L	TOLERANT OF OTHERS
36	L2H	TYRANNICAL
37	M1L	PRACTICAL
38	M1H	IMAGINATIVE
39	M2L	LIVES BY PRACTICAL NEEDS
40	M2H	LIVES BY IDEAS
41	N1L	VAGUE
42	N1H	EXACT

43	N2L	CONTENT WITH WHAT COMES
44	N2H	AMBITIOUS
45	O1L	SELF-ASSURED
46	O1H	APPREHENSIVE
47	O2L	INSENSITIVE TO DISAPPROVAL
48	O2H	SENSITIVE TO DISAPPROVAL
49	Q11L	CONSERVATIVE
50	Q11H	EXPERIMENTING
51	Q12L	TRADITIONS BOUND
52	Q12H	FREE THINKING
53	Q21L	GROUP-DEPENDENT
54	Q21H	SELF-SUFFICIENT
55	Q22L	A JOINER
56	Q22H	LIKES INDEPENDENCE
57	Q31L	FOLLOWS OWN URGES
58	Q31H	CONTROLS OWN URGES
59	Q32L	CARELESS OF SOCIAL RULES
60	Q32H	FOLLOWS SOCIAL RULES
61	Q41L	RELAXED
62	Q41H	TENSE
63	Q42L	UNFRUSTRATED
64	Q42H	FRUSTRATED

APPENDIX C

RESPONSE SHEET


0
1
2
3
4
5
6
7
8
9
10
UNLIKE ME
LIKE ME

APPENDIX D

R-SORT SCORE CONVERSION PROGRAM

```
200    REM AUTHOR: DR. KHOKHLOV
205    REM REVISIONS BY LORRAINE GORSKI
210    REM N$=LABEL NUMBER,F$=FACTOR CODE,L$=POLAR
       LABEL,S=SCORES
220      DIM
         T$(22),D1(16,4),P$(16,4),N$(16,4),F$(16,4),L$(16,4),
         S(16,3)
230      DIM F1$(16),A1(16,2),B1(16,2) !FACTOR ID  SCORES FOR
         2 PAIRS!
240      DIM R1$(3),V(11) !R1$=PAIR CODE FOR THE FILE,
         V=NUMBER OF CARDS!
250      DIM G$(11,30),C9(64) !G$=ARRAY FOR DATA DISPLAY,
         C9=REPEAT CHECK!
255     DIM F2$(64)
260     OPEN "A:LAB34." FOR INPUT AS FILE 1%
270     R1$(1)="R1":R1$(2)="R2":R1$(3)="RB"
280     U=0: Z$=" ": T9$="."
290     FOR I=1 TO 16
300     FOR J=1 TO 4
310     D1(I,J)=0
320     INPUT  1,P$(I,J)
330     U=U+1
340     L=LEN(P$(I,J)): Z1=2: Z2=14: Z3=24: Z4=3
350     IF U<10 THEN Z2=13\Z3=23
360     IF U>48 THEN Z4=4
370     N$(I,J)=LEFT(P$(I,J),Z1):
        F$(I,J)=MID(P$(I,J),Z2,Z4):F1=1
380     IF U>48 THEN F1=2
390     IF J=1 THEN F1$(I)=LEFT(F$(I,J),F1)  !FACTOR
        IDENTIFICATION!
400     L$(I,J)=RIGHT(P$(I,J),Z3):
        L$(I,J)=CVT$$(L$(I,J),132%)
410     IF U<10 THEN
        N$(I,J)="0"+N$(I,J)\N$(I,J)=LEFT(N$(I,J),2)
420     NEXT J
430     NEXT I
440     CLOSE 1
445     OPEN "A:SRTDAT.TXT" AS FILE 3%, MODE 2%
540     INPUT "YOUR CLASS CODE";C$
545     INPUT "SUBJECT CODE NUMBER";C5$
547     INPUT "SEX";S3$
549     INPUT "AGE";A3$
550     IF C$="E" GOTO 540
```

```
570     OPEN "A:LORDAT." AS FILE 2%,MODE 2%
571     N9=0
572     FOR I=0 TO 10
573     FOR J=1 TO 30
574     G$(I,J)="0"
575     NEXT J
576     NEXT I
577     FOR I=1 TO 64
578     C9(I)=0
579     NEXT I
580       PRINT TAB(10);"IS THAT A FIRST RUN OR A RE-RUN TO
          CREATE A RECORD"
581       PRINT TAB(10);"(FIRST RUN WILL INCLUDE PRINT-OUT
          HERE, RERUN WILL"
582       PRINT TAB(10);"AVOID IT,SO TYPE 'F' FOR FIRST AND
          'R' FOR RERUN).";
583       F9=1\INPUT F9$
584       PRINT\PRINT
585       IF F9$="R" THEN F9=0\GOTO 599
586       PRINT TAB(10);"THIS PROGRAM PROVIDES PRINTING OF
          THE"
587       PRINT TAB(10);"RESULTS ON THE LOCAL PRINTER."
588       PRINT TAB(10);"TO ACCOMPLISH THAT, YOU MUST RUN
          THIS"
589       PRINT TAB(10);"TERMINAL ON LOW SPEED. THEREFORE,
          CHECK"
590       PRINT TAB(10);"THE SPEED SWITCH AND IF IT IS IN
          THE"
591       PRINT TAB(10);"'HIGH' POSITION, TYPE 'SET
          HIGH',CARRIAGE RETURN"
592       PRINT TAB(10);"AND FLIP THE SWITCH TO HIGH. THEN"
593       PRINT TAB(10);"YOU MUST CALL THIS PROGRAM AGAIN BY"
594       PRINT TAB(10);"TYPING  'RUN RSORT'."
595       PRINT TAB(10);"REMEMBER: YOU CAN NOT CHANGE SPEED
          IN"
596       PRINT TAB(10);"THE MIDDLE OF THIS PROGRAM!"
597       PRINT\PRINT
598       PRINT "IF YOU MAKE A MISTAKE, TYPE 'E' AND THE
          COMPUTER WILL BACKTRACK"
599       PRINT
600     INPUT "SUBJECT'S CODE:";S$
602     IF S$="E" THEN CLOSE 2\GOTO 540
605     L=LEN(S$): L=L-2: K=8-L
610     IF K=0 GOTO 670
620     IF K<2 THEN PRINT "SUBJECT'S CODE MUST BE LESS THAN 7
          LETTERS"\GOTO 580
630     FOR I=1 TO K
640     S$=S$+Z$
650     NEXT I
660     L=0: K=0
670     INPUT "SORT TYPE ('A' FOR ACTUAL AND 'I' FOR
        IDEAL)";R$
680     R$=LEFT(R$,1)
```

```
690     IF R$="I" THEN R$="IDEAL" \R2$="ID"
700     IF R$="A" THEN R$="ACTUAL"\R2$="AC"
710     IF R$="E" GOTO 600
720     N2$=""
750     FOR I=0 TO 10
760     V1=0: V(I)=0
770     IF I<0 THEN I=0
780     REM C$=CLASS CODE, S$=SUBJECTS' CODE, R$=SORT TYPE
790     REM N1=NUMBER OF CARDS IN A COLUMN, N2=CARD NUMBER,
        N3,N4=CONVERSIONS
800     PRINT\PRINT "NUMBER OF CARDS IN COLUMN";I;
810     INPUT N1$
820     IF N1$="E" AND I=0 GOTO 670
830     IF N1$="E" AND I>0 THEN I=I-1\GOTO 900
840     N1=VAL(N1$): V(I)=N1
850     IF N9<V(I) THEN N9=V(I)
860     IF N1=0 GOTO 1130
870     PRINT\PRINT "TYPE ";N1$;" OBSERVATIONS IN COLUMN";I;
880     PRINT
890     GOTO 910
900     N1=V(I): V1=1
910     FOR J=1 TO N1
920     IF V1=0 GOTO 960
930     J=N1
940     IF G$(I,J)="-1" THEN G$(I,J)="0"
950     IF G$(I,J)<>"-1" THEN C9(VAL(G$(I,J)))=0
960     PRINT "OBSERVATION  ";J;" IN COLUMN";I;
970     INPUT N2$
980     IF J=1 AND N2$="E" GOTO 770
990     IF J>1 AND N2$="E" THEN J=J-1\GOTO 1010
1000     GOTO 1040
1010     IF G$(I,J)="-1" THEN G$(I,J)="0"
1020     IF G$(I,J)<>"-1" THEN C9(VAL(G$(I,J)))=0
1030     GOTO 960
1040     N2=VAL(N2$)
1050     N3=N2/4: N4=INT(N3): N5=N3-N4: N6=N5*4: N4=N4+1
1060     IF N5=0 THEN N6=4\N4=N4-1
1070     D1(N4,N6)=I
1080     IF C9(N2)=1 THEN G$(I,J)="-1" ELSE G$(I,J)=N2$
1090     C9(N2)=1
1100     V1=0
1110     NEXT J
1120     V(I)=J
1130     NEXT I
1140     T$(0)="": A$="L": B$="H": X$="*"
1150     PRINT\PRINT TAB(12);"THIS IS A GRAPHIC SUMMARY OF
         YOUR DATA"
1160     PRINT\PRINT "COLUMNS AND NUMBER OF OBSERVATIONS IN
         EACH:"\PRINT
1170     FOR J=0 TO 10
1180     J$=NUM$(J)
1190     IF J<10 THEN J$=Z$+J$
1200     PRINT T9$;Z$;J$;Z$;
```

```
1210    NEXT J
1220    PRINT T9$
1230    FOR J=0 TO 10
1240    J$=NUM$(V(J))
1250    IF V(J)<10 THEN J$=Z$+J$
1260    J$=RIGHT(J$,2): J$=LEFT(J$,2)
1270    PRINT T9$;Z$;"(";J$;")";Z$;
1280    NEXT J
1290    PRINT T9$
1300    FOR J=1 TO 11
1310    PRINT ".------";
1320    NEXT J
1330    PRINT "."
1340    FOR I=N9 TO 1 STEP -1
1350    FOR J=0 TO 10
1360    P9=VAL(G$(J,I))
1370    IF P9<0 THEN J$=" *"\GOTO 1410
1380    IF P9=0 THEN J$=" -"\GOTO 1410
1390    IF P9<10 THEN J$=Z$+G$(J,I)\GOTO 1410
1400    IF P9>9 THEN J$=G$(J,I)
1410    T7$=T9$+Z$+Z$+J$+Z$+Z$
1420    PRINT T7$;
1430    NEXT J
1440    PRINT T9$
1450     NEXT I
1460     C8=0: C7$="THE"
1470     FOR I=1 TO 64
1480     IF C9(I)=0 AND C8=0 GOTO 1520
1490     IF C9(I)=0 AND C8=1 GOTO 1540
1500     NEXT I
1510     GOTO 1560
1520     PRINT\PRINT "ASTERISKS INDICATE CARDS THAT WERE
         REPEATED IN YOUR DATA";
1530     PRINT", PLEASE, CHECK!"
1540     PRINT C7$;" CARD THAT WAS NOT USED IS:";I
1550     C9(I)=1: C7$="ANOTHER"\C8=1\GOTO 1500
1560     PRINT
1570     INPUT "WELL..IS THE DATA CORRECT (TYPE 'YES' OR
         'NO')";Y9$
1580     IF Y9$="YES" THEN PRINT\GOTO 1600
1590    PRINT TAB(10); "WE HAVE THEN TO START ALL OVER
        AGAIN"\GOTO 571
1600    IF F9=0 THEN 1685
1610    PRINT TAB(10);"IF YOU WANT THE RESULTS TO BE
        PRINTED, NOW IS THE TIME"
1620    PRINT TAB(10);"TO FLIP THE PRINTER SWITCH. THEN
        PRESS CARRIAGE RETURN"
1630    PRINT TAB(10);"AND THE R-SORT ANALYSIS WILL BE
        PRINTED";
1640    INPUT C9$
1650    PRINT
1660    PRINT DATE$(0);"   ";TIME$(0);"   CLASS CODE:";C$;"
        SUBJECT CODE:";S$
```

```
1670    PRINT "SORT TYPE:";R$
1680    PRINT
1685     X=1
1690    FOR K=1 TO 16
1700    FOR L=1 TO 5 STEP 2
1710    FOR M=1 TO 22
1720    T$(M)="."
1730    NEXT M
1740    IF L=5 GOTO 1780
1750    A=D1(K,L): B=D1(K,(L+1))
1760    IF L=1 THEN E=1\E$="PAIR  1" !PAIR IDENTIFICATION!
1770    IF L=3 THEN E=2\E$="PAIR  2"
1780    IF L=5 THEN E$="BOTH PAIRS"\E=3\GOTO 1810
1800    IF L<5 GOTO 1820
1810    A=(A1(K,1)+A1(K,2))/2: B=(B1(K,1)+B1(K,2))/2
1820    IF A=0 AND B=0  GOTO 2320
1830    IF A=0 GOTO 1860
1840    IF B=0 GOTO 1880
1850    GOTO 1900
1860    W=B: T$(B*2)=X$: C=A
1870    GOTO 1920
1880    C=11-A: W=C: T$(W*2)=X$
1885    IF L=5 THEN C=A:W=(C+B)/2
1890    GOTO 1920
1900    C=11-A: W=(C+B)/2
1905    IF L=5 THEN C=A: W=(C+B)/2
1910    T$(C*2)=A$: T$(B*2)=B$: T$(W*2)=X$
1920    IF F9$="F" THEN PRINT "FACTOR:";F1$(K),E$
1930    IF L=5 GOTO 1960
1935    A1(K,E)=C:B1(K,E)=B
1936    F2$(X)=NUM1$(C): F2$(X+1)=NUM1$(B)
1937    IF F2$(X) = '10' THEN F2$(X) = 'A'
1938    IF F2$(X+1) = '10' THEN F2$(X+1) = 'A'
1939    IF F2$(X)='10' THEN F2$(X)='A': IF F2$(X+1)='10'
        THEN F2$(X+1)='A'
1940    IF F9$="F" THEN PRINT "L:";L$(K,L)"=";C;"
        H:";L$(K,(L+1));"=";B
1950    GOTO 1970
1960    IF F9$="F" THEN PRINT "LOW LABELS AVERAGE:";C;"
        HIGH LABELS AVERAGE:";
1970    IF F9$="F" THEN PRINT "R-COMPOSITE SCORE=";W\PRINT
1980    S(K,E)=W
1990    IF F9$="F" THEN PRINT " ";
2000    FOR I=2 TO 20
2010    IF F9$="F" THEN PRINT T$(I);" ";
2020    NEXT I
2030    IF F9$="F" THEN PRINT
2040   FOR J=1 TO 10
2050   IF J=10 GOTO 2080
2060   IF F9$="F" THEN PRINT J;" ";
2070   GOTO 2100
2080   J$=NUM$(J): J$=RIGHT(J$,2)
2090   IF F9$="F" THEN PRINT J$;" "
```

```
2100    NEXT J
2110    IF F9$="F" THEN PRINT FOR Q=1 TO 4
2115    IF L<> 5 THEN X=X+2
2120    NEXT L
2130    NEXT K
2133      PRINT  3,S3$;A3$;
2135      PRINT  3,F2$(I); FOR I=1 TO 64
2137      PRINT  3,R2$;C5$
2140    PRINT "SUMMARY FOR THE RECORD:"\PRINT
2150    FOR L=1 TO 3
2160    PRINT C$;TAB(4);S$;"SORT:";R2$;"/";R1$(L)
2170    PRINT  2,C$;"  ";S$;"SORT:";R2$;"/";R1$(L)
2180    FOR J=1 TO 16
2190    H$=NUM$(S(J,L)): H$=RIGHT(H$,2)
2200    K=LEN(H$)\ K=K-1\H$=LEFT(H$,K)
2210    IF K=1 THEN H$=H$+".00"
2220    IF K=3 THEN H$=H$+"0"
2230    IF K=2 THEN H$=H$+".0"
2240    H$=H$+Z$
2250    PRINT  2,H$;
2260    PRINT H$;
2270    NEXT J
2280    PRINT
2290    PRINT  2\PRINT  2
2300    NEXT L
2310    GOTO 2380
2320    IF F9$="F" THEN PRINT "PAIR  ";E;" OF FACTOR
        ";F1$(K);
2330    IF F9$="F" THEN PRINT TAB(10);"L=";A,"H=";B
2340    IF F9$="F" THEN PRINT "FACTOR ";F1$(K);" IS NOT
        REPRESENTED BY THIS PAIR"
2350    IF F9$="F" THEN PRINT
2353    IF L=5 THEN GOTO 2115
2355    A1(K,E)=A: B1(K,E)=B
2357    F2$(X)=NUM1$(A): F2$(X+1)=NUM1$(B)
2360    GOTO 2115
2380    PRINT  2
2390    INPUT "MORE";Y9$
2400    CLOSE 3
2405    OPEN "A:SRTDAT.TXT" AS FILE 5%, MODE 2%
2410    OPEN "A:SRTDAT.FNL" FOR OUTPUT AS FILE 6%
2415    ON ERROR GOTO 2445
2420    INPUT LINE  5, L3$
2425    L=LEN(L3$):L=L-2
2430    L3$=LEFT(L3$,L)
2435    PRINT  6,L3$
2440    GOTO 2420
2445    IF ERR<> 11 THEN PRINT "ERROR AT ";ERL
2447    CLOSE 5,6
2448    IF Y9$="YES" GOTO 445
2600    END
```

APPENDIX E

Instructions for R-Sort

The following experiment is designed to determine factors influencing personality. You will be requested to sort sixtyfour cards twice. Once describing the way you actually are and secondly, how you would like to, or could be. Each sort will take approximately fifteen minutes or less.

You will be given two items, a stack of sixtyfour cards on which words and phrases have been printed and a columned response sheet. You'll notice the columns are numbered 0 through 10. Examine each card and place it along this scale based on the degree to which it is not like you (column 1), like you (column 10), or not applicable (column 0). Please remember column 5 represents a neutral response. The sorting of the cards is finished when you believe the placement of each card best represents you. Don't hesitate to move a card if you find a better position. This is not a timed experiment so don't rush.

If you are interested in the results of this study, please write your address on the back of this form. Please also remember that all data gathered will remain confidential.

Initials_____
Sex_____
Age (nearest year)_____

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